

LICHTENSTEIN'S PLURAL DISTRIBUTIVE GENERIC NAMES
BUBALIDES, CONNOCHAETES AND GAZELLAE.

In 1814 Lichtenstein (*Mag. Ges. naturf. Freund.* Berlin, vol. 6, p. 152 and following) in a monograph of the genus *Antilope* recognized 29 species in that genus and grouped them into 4 tribes: "*Bubalides*," with 8 species; "*Connochaetes*," with one species; "*Antilopae genuinae*," with 8 species, and *Gazellae* with 12 species, the names of the tribes being in plural distributive form. The names applied to two of the tribes have found their way into systematic zoology in the form of singular collective nouns as valid terms for well established genera of Ungulates, Lichtenstein being commonly cited as their authority. A third name, *Connochaetes*, is in current use, still in its plural form, for another genus. The fourth tribe designation, "*Antilopae genuinae*," having no semblance of a generic or subgeneric name has never entered nomenclature, though in analogy with *Gazella* and *Bubalis*, *Antilopa* might be construed as an emendation of the original and currently used *Antilope*. It seems curious that the singular spelling of *Connochaetes* does not appear to have been used by authors. Yet if sanction be given to *Bubalis* and *Gazella*, why not employ *Connochaeta* or *Connochaete*?

Although the assemblages of species in Lichtenstein's "Tribus" designated by plural distributive nouns are the equivalent of modern genera, the fact is that the currently used *Bubalis* and *Gazella* as singular collective nouns do not occur in Lichtenstein. They should accordingly take date and authorship from the first writer to use them as singular collective nouns applied to subgenera or genera. The case of *Connochaetes* is similar with the difference that subsequent writers using it seem to think it is in singular collective form. Consideration of each of Lichtenstein's monomial terms and their subsequent use as singular collective nouns results as follows:

Bubalides Lichtenstein, 1814, is a plural distributive noun and as such is not the proper designation of a subgenus. The next use of this word is by Rafinesque as *Bubalis* (*Analyse de la Nature*, p. 56) in 1815. It is there a singular collective noun but stands without description or reference. The earliest use of *Bubalis* as a valid name and a collective word is apparently by Goldfuss in 1820 (*Handb. Zool.*, vol. 2, p. 367). Here it occurs as [section or subgenus] "a" of the genus *Antilope* Pallas with the species "*A. bubalis* L. Vache de Barbarie. Menag. du Mus I, p. 346," type by tautonomy, and "*A. caama* Cuv. Hartebeest. Cerf du Cap. Schreb. t. 277." *Bubalis*, Frisch, 1775 (*Syst. vierf. Thier.*, p. 2) should be ignored as being employed by a non-binary author (see Thomas and Miller, *Ann. Mag. Nat. Hist.*, Ser. 7, vol. 16, p. 463, 1905).

Gazellae Lichtenstein, 1814, is not used as a singular collective noun and consequently can not be considered as the proper designation of a subgenus of antilopes. The first use of the word as a singular collective noun is by Rafinesque (*Analyse de la Nature*, p. 56), 1815, but like *Bubalis* it appears without description or reference. It was next employed by Blainville (*Bull. Soc. Philom.*, 1816, p. 73) one year later as a subgenus of *Antilope*, adequately described, and with nine species: *dorcas*, *kevella*, *corinna*, *subgutturosa*, *euchore*, *pygara*, *koba*, *kob*, and *nasoma-*

culata. The type of Blainville's genus *Gazella* was selected by Ogilby in 1837 (Proc. Zool. Soc. London, vol. 4, p. 137) as *Antilope dorcas* and the subgenus itself was raised to generic rank.

Connochaetes of Lichtenstein, 1814, has the same criticisms against it as have *Gazellae* and *Bubalides*, but the word is not so obviously in plural distributive form. It has been adopted in its original spelling by most recent authors as the generic name of the gnus. According to the generally accepted rules the proper form of the word should be *Connochaeta* if admitted into nomenclature at all. Subsequent to Lichtenstein's distributive use of *Connochaetes*, no author appears to have used the word until Gray mentions it in 1843 (List Spec. Mamm. Brit. Mus., p. XXVI) spelled *Connochetes*. Meantime two other generic names had been proposed embracing the gnus, *Cemas*, Oken, 1816 (Lehrbuch Naturgesch., part 3, vol. 2, p. 727) and *Catablepas*, Gray, 1821 (London Medical Repository, vol. 15, p. 307), each with the same type, *Antilope gnu* Gmelin (See Sclater and Thomas, Book of Antelopes, vol. 1, p. 93, 1895). The singular collective *Cemas* should thus replace the plural distributive *Connochaetes*. This change is not far reaching because Gray in 1850 (Knowsley Menagerie, p. 20) proposed *Gorgon* as a subgenus of *Catablepas*. *Gorgon*, embracing all the gnus except the white-tailed gnu, has lately been raised to generic rank (Heller, Smiths. Misc. Coll., vol. 6, no. 8, pp. 3, 19; Roosevelt and Heller, Life Histories African Game Animals, p. 361, 1914). The white-tailed gnu would thus constitute the genus *Cemas*.

It is hoped the publication of this note will bring attention to generic and subgeneric names used in plural distributive form and perhaps lead to some uniformity in treating them. A few other plural generic names exist in mammalogy, but only Lichtenstein's three genera mentioned above are taken seriously, the others being properly ignored.

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FURTHER NOTE ON THE GENERIC NAME OF THE COLLARED PECCARIES.

Dr. J. A. Allen has kindly called my attention to the fact that my recent conclusion * regarding the generic name of the collared peccaries is incorrect. While it is true that Palmer in 1904 regarded the species *torquatus* as type of Cuvier's genus *Dicotyles*, Gray in 1868† had selected‡ *labiatus* (Cuvier 1817 = *pecari* Fischer 1814). As *labiatus* (= *pecari*) was already type § of *Tayassu* Fischer 1814, the name *Dicotyles* lapses into synonymy. Reichenbach's *Pecari* 1835,|| is therefore the earliest generic name available for the collared peccaries.

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* These Proceedings, p. 215. October 31, 1914.

† Proc. Zool. Soc. London, 1868, p. 45.

‡ See Opinion No. 6, Int. Comm. Zool. Nomenclature. July, 1910.

§ By absolute tautonymy. As a synonym of his accurately diagnosed and described *Tayassu pecari*, "T. corpore nigro, maxillâ inferiore albâ," Fischer places the name "*Sus Tayassu* Linn. Gmel. syst. nat. 219. n. 3." (Zoognosia, vol. 3, p. 285).

|| Bildergalerie der Thierwelt, Heft 6, p. 1. Type by monotypy *Sus torquatus* Cuvier. The entire case is correctly stated in my List of North American Land Mammals in the United States National Museum, 1911, pp. 383, 384, December 31, 1912, except that a reference to Gray, 1868, should take the place of the words "now selected," under *Dicotyles*, in line 9, p. 384.